

**GAO**

United States General Accounting Office

Report to Congressional Committees

August 2000

# DEPOT MAINTENANCE

## Action Needed to Avoid Exceeding Ceiling on Contract Workloads



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# Contents

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Letter		3
Appendixes	Appendix I: Problem Areas in Workload Reports Appendix II: GAO Contacts and Staff Acknowledgements	28 37
Related GAO Products		38
Tables	Table 1: Reported Depot Maintenance Workload Allocations Table 2: Amount of Workload That Could Have Been Shifted From Public to Private Sector in Fiscal Year 1999 Without Exceeding 50-percent Ceiling	5 9
Figures	Figure 1: Percentage of Depot Maintenance Work Performed by the Private Sector	8

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## Abbreviations

DOD	Department of Defense
OSD	Office of the Secretary of Defense





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Congressional Committees

Section 2466 of title 10, United States Code, stipulates that not more than 50 percent of the funds made available in a fiscal year to a military department or defense agency for depot-level maintenance and repair may be used for work performed by private sector contractors. As amended by the National Defense Authorization Act for Fiscal Year 2000, the statute requires the Department of Defense to submit two reports to the Congress annually on public and private sector depot maintenance and repair workloads. The first is to report on the percentage of funds associated with such workloads during the preceding 2 fiscal years. The second is to report projected expenditures for the current and for 4 succeeding fiscal years.

As required by 10 U.S.C. 2466 (e) (3), we reviewed the Department's reports, which were submitted in February and April 2000, respectively, on the percentage of depot maintenance funding. Accordingly, this report (1) provides information on the Department's compliance with the 50-50 requirement for fiscal years 1998 and 1999, (2) sets forth our views on the Department's progress in improving the quality of the workload data for the previous fiscal years, and (3) assesses the reasonableness of the Department's estimates of expenditures for fiscal years 2000 through 2004.

## Results in Brief

Although the Defense Department's report covering fiscal year 1998 and 1999 workloads shows that the Air Force, the Army, and the Navy<sup>1</sup> were in compliance with the 50-percent ceiling set by section 2466, because of continuing errors and weaknesses in the Department's data, we could not determine whether the military services were in compliance with the 50-percent ceiling for the percentage of depot maintenance performed by the private sector in fiscal year 1999.

The quality of the data reported for fiscal year 1999 was substantially improved from prior years. Improvements made in the data and reporting

<sup>1</sup>Since data is reported by individual military department, the Marine Corps data is included with that of the Navy.

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process reduced the amount of errors found or led to corrections of errors before data were reported to the Congress. We attribute these improvements largely to better guidance provided by the Office of the Secretary of Defense, the reporting of more comprehensive data, improved audit coverage by the military services, and the correction of errors by the services before the data were reported to the Congress. However, we continue to find errors and inconsistencies in the reporting of depot-level workload and limitations in how well the services documented their analyses supporting their workload reports.

We do not believe that the Department's projections of depot maintenance workloads for fiscal years 2000 through 2004 are a reasonably accurate projection of future depot maintenance expenditures. Future year expenditure projections, at best, provide a rough estimate of future workload funding split between the public and private sectors since the projections are constructed using budgetary estimates that by their nature, will change over time. The Department's future year projections do not show the reporting services exceeding the 50-percent ceiling on contract work in fiscal year 2000 and beyond. However, the reasonableness of the estimates is doubtful because of uncertainties that exist regarding the extent to which the services have fully identified private sector depot maintenance workloads. Further, our analysis of available data indicates that the Air Force (1) may exceed the ceiling by about \$200 million this fiscal year and (2) faces significant management challenges to remain under the ceiling in future years. While the Army does not face as severe a problem as the Air Force, available data suggest it too could be confronted with management challenges if it is to stay within the 50-percent ceiling in future years.

This report contains recommendations to the Secretary of Defense to direct actions to improve the accuracy and completeness of departmental reporting and management actions to help meet the requirements of section 2466 that limit the amount of depot maintenance work that can be performed by the private sector to not more than 50 percent of the depot maintenance program. DOD officials agreed with our findings and recommendations, and offered additional comments about the actions undertaken or planned to address the issues discussed.

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## Background

Section 2466 of title 10 of the United States Code governs the allocation of depot maintenance work between the public and private sectors. It prohibits each military department and defense agency from using more than 50 percent of the total funds that are provided annually for depot-level maintenance and repair on work done by contractors. This is referred to as the 50-50 requirement.

The National Defense Authorization Act for Fiscal Year 2000 amended section 2466 to require the Department of Defense (DOD) to annually submit two reports to the Congress, one on expenditures in the preceding years and the other on estimated allocations in future years.<sup>2</sup> Before this amendment, DOD was only required to report each year the depot maintenance funding allocations for the preceding fiscal year. Section 2466 currently requires us to submit to the Congress our views on whether (1) DOD has complied with the 50-50 requirement in the preceding years' report and (2) the expenditure projections in the future years' report are reasonable. The report on fiscal year 1998 and 1999 workloads, dated February 4, 2000, and the report on fiscal year 2000 through 2004 estimates, submitted April 7, 2000, were the initial reports submitted under the amended statute. Table 1 provides a consolidated summary of DOD's reported depot maintenance public and private sector workload allocations.

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<sup>2</sup>P.L. 106-65, section 333.

**Table 1: Reported Depot Maintenance Workload Allocations**

Dollars in millions by fiscal year

	1998	1999	2000	2001	2002	2003	2004
<b>Army</b>							
Public	\$1,011.1	\$1,010.3	\$1,084.3	\$1,033.7	\$1,098.2	\$1,126.8	\$1,189.2
	58.3%	54.3%	56.6%	57.2%	54.0%	53.9%	54.5%
Private	\$722.8	\$849.5	\$832.7	\$772.5	\$935.5	\$963.2	\$992.1
	41.7%	45.7%	43.4%	42.8%	46.0%	46.1%	45.5%
<b>Total</b>	<b>\$1,733.9</b>	<b>\$1,859.8</b>	<b>\$1,917.0</b>	<b>\$1,806.2</b>	<b>\$2,033.7</b>	<b>\$2,090.0</b>	<b>\$2,181.3</b>
<b>Navy</b>							
Public	\$4,040.1	\$3,898.7	\$4,290.4	\$3,884.1	\$4,358.5	\$4,997.3	\$4,584.8
	63.6%	57.0%	59.6%	58.4%	61.5%	65.1%	61.7%
Private	\$2,310.2	\$2,938.4	\$2,908.4	\$2,768.1	\$2,733.8	\$2,682.1	\$2,851.8
	36.4%	43.0%	40.4%	41.6%	38.5%	34.9%	38.3%
<b>Total</b>	<b>\$6,350.3</b>	<b>\$6,837.1</b>	<b>\$7,198.8</b>	<b>\$6,652.2</b>	<b>\$7,092.3</b>	<b>\$7,679.4</b>	<b>\$7,436.6</b>
<b>Air Force</b>							
Public	\$3,335.1	\$3,281.9	\$3,130.3	\$3,292.3	\$3,573.2	\$3,601.9	\$3,681.7
	58.2%	53.1%	50.5%	52.0%	52.7%	52.1%	52.0%
Private	\$2,397.6	\$2,902.7	\$3,066.6	\$3,041.6	\$3,206.7	\$3,310.2	\$3,396.4
	41.8%	46.9%	49.5%	48.0%	47.3%	47.9%	48.0%
<b>Total</b>	<b>\$5,732.7</b>	<b>\$6,184.6</b>	<b>\$6,196.9</b>	<b>\$6,333.9</b>	<b>\$6,779.9</b>	<b>\$6,912.1</b>	<b>\$7,078.1</b>

Source: DOD data reported to the Congress.

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Section 2460 of title 10 defines depot-level maintenance and repair workloads. The Office of the Secretary of Defense (OSD) has issued guidance implementing section 2460. The guidance provides a comprehensive definition of depot maintenance to ensure that the reporting includes all work associated with the overhaul, upgrade, or rebuild of parts, assemblies, and subassemblies, and the testing and reclamation of equipment as necessary, regardless of the source of funds or the location at which maintenance is performed. The definition provides that software maintenance and interim contractor support and contractor logistics support, to the extent work performed in these two categories is depot maintenance, should be reported. Prior to the enactment of this section,<sup>3</sup> depot maintenance was often viewed as limited to that maintenance work performed at traditional military depots or contractor facilities and funded using operation and maintenance dollars.

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## Data Weaknesses Preclude Determination of Compliance

The military services' data in the February 2000 report were more complete than in prior years' reports. However, because of errors and weaknesses in components' data and reporting processes,<sup>4</sup> combined with the increasing closeness of two of the services to the 50-percent ceiling, we were unable to determine whether the services had complied with section 2466. DOD's report, as presented, indicates that each of the reporting military services was in compliance with the 50-50 requirement for fiscal years 1998 and 1999, even as the Air Force and the Army showed a general trend of increased reliance on the private sector.

Because of weaknesses in reporting, we cannot be sure of the precise amounts of depot workload being performed by government and private sector employees. However, DOD reports an increasing trend among its services in relying on the private sector for this work. Figure 1 shows the percentage of the total reported depot maintenance workloads identified

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<sup>3</sup>This provision was contained in the National Defense Authorization Act of Fiscal Year 1998 (P.L. 105-85, Nov. 18, 1997).

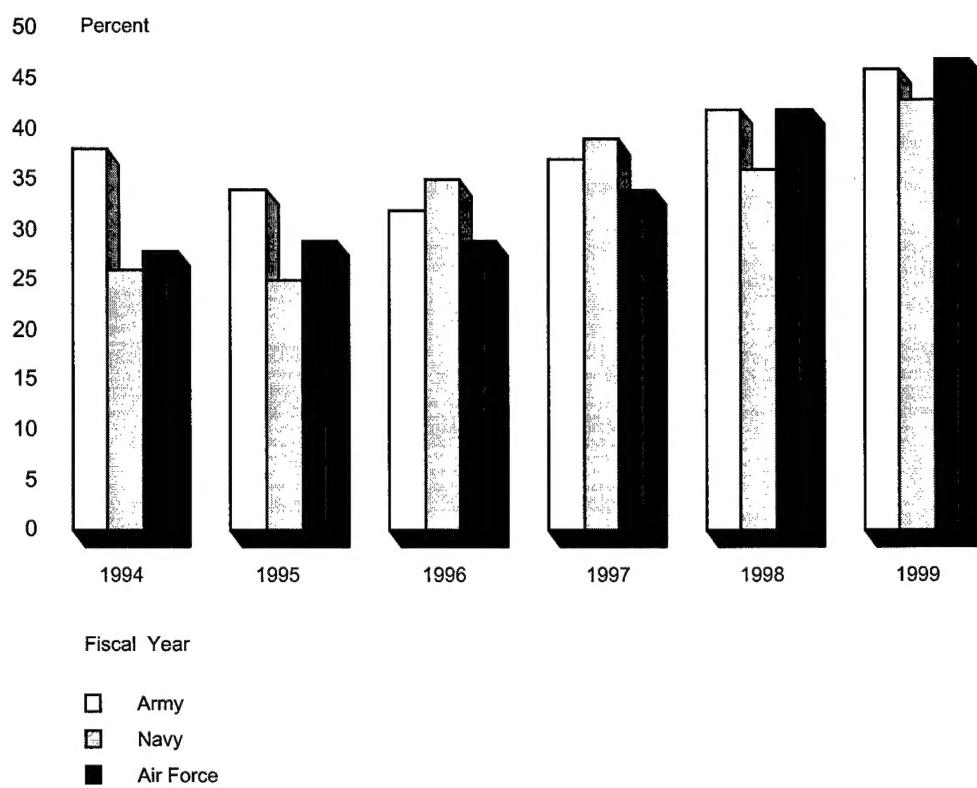
<sup>4</sup>In addition to the data reliability weaknesses identified in this review, our audits of DOD's financial management operations routinely identify pervasive weaknesses in financial systems and fund controls that adversely affect the Department's ability to accumulate costs and reliably determine expenditures obligations, and funding availability. (See *Department of Defense: Progress in Financial Management Reform* (GAO/T-AIMD/NSIAD-00-163, May 7, 2000.)

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by the military services as being performed by the private sector from fiscal years 1994 through 1999.

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**Figure 1: Percentage of Depot Maintenance Work Performed by the Private Sector**



Note: The reporting baseline changed with the addition of contractor logistics support and interim contractor support costs in 1998. While the annual data points are not directly comparable as a result, this figure still illustrates DOD's overall movement closer to the 50-percent ceiling.

Sources: DOD depot workload reports for March 1996, February 1998, February 1999, and February 2000.

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As the services get closer to the 50-percent ceiling, there is less room for error in the reported data. According to DOD's reported fiscal year 1999 depot maintenance workload allocation data, the amount of additional contract maintenance work that could have been shifted from the public to the private sector without exceeding the 50-percent limit was about \$80 million in the Army,<sup>5</sup> about \$190 million in the Air Force, and about \$480 million in the Navy. However, our review of DOD's data identified various errors and omissions, some of which we were able to quantify. (These errors and omissions are discussed more fully in a subsequent section and app. I.) After considering those errors, we found that each of the military services was brought closer to the ceiling.<sup>6</sup> The revised amount and the percentage of maintenance workload that could have been shifted from the public to the private sector for each military department before exceeding the 1999 ceiling is shown in table 2.

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**Table 2: Amount of Workload That Could Have Been Shifted From Public to Private Sector in Fiscal Year 1999 Without Exceeding 50-percent Ceiling**

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Dollars in millions	Revised total workload	Available dollars	Percent
Army	\$1,898.3	\$63.9	3.4
Navy	6,875.0	442.9	6.4
Air Force	6,218.8	129.5	2.1

Source: Our analysis and adjustment of service data to correct for errors and omissions that could be quantified.

Given the closeness of the Army and the Air Force to the 50-percent ceiling and, as discussed later, questions about the accuracy and completeness of components' reporting that cannot be readily quantified, we cannot be certain of the potential impact on the 50-percent ceiling for contracted

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<sup>5</sup>According to an Army official, while this figure is technically accurate, it is premised on taking that amount of work from public depots and transferring it to the private sector. The official said a more useful measure to Army management is \$161 million—the total difference between the reported public and private sector amounts for fiscal year 1999, as shown in table 1. We believe both figures provide important perspectives on the closeness of the Army's workload to the 50-50 ceiling.

<sup>6</sup>This does not include the impact of the uncertainties regarding the completeness of reporting that we were unable to quantify.

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work. While the Navy is not nearly as close to the ceiling, we have some concerns about the accuracy and completeness of its data.

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## Significant Progress in Reporting but Material Errors Still Remain

The quality and comprehensiveness of the data in DOD's February 4, 2000, report on depot maintenance workloads are significantly better than the data in prior reports. Nonetheless, material reporting weaknesses still exist. Our analysis of the most recent prior year data for the fiscal year 1999 depot maintenance program identified fewer errors than in the past. However, some areas still require increased focus, particularly the isolation of reportable data in areas not traditionally considered to be included in depot maintenance reporting. These areas include identifying government-furnished material that should be reported as a contract maintenance cost and correctly identifying maintenance work that (1) has sometimes not been identified as depot maintenance because it is not funded with operation and maintenance dollars, (2) is not performed in traditional depot activities, or (3) is managed by activities such as system program offices that historically did not deal with traditional depot activities. Additionally, problems in documentation and financial management reporting continue to affect the quality of the data.

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## Improved Depot Maintenance Workload Reporting

DOD has made significant progress in its workload reporting over the past 3 years. By issuing improved guidance, increasing the awareness of the reporting requirements to activities not previously involved, and more effectively using internal audit groups, it improved the February 2000 report over last year's report and detected and corrected many errors in the services' data before the consolidated report was submitted to the Congress.

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**Expanded Guidance and Corrections of Prior Problems**

In response to our prior audit reports,<sup>7</sup> OSD expanded its guidance to address several areas of concern we noted in last year's report, and the revised guidance is generally comprehensive. These areas included depot-level maintenance provided in remanufacturing<sup>8</sup> programs, interserviced<sup>9</sup> workloads, repair of reparable parts, warranties for depot repair, and suggested use of audit agencies to verify data. Better, more expansive guidance resulted in improved and more complete reporting. For example, the Navy reported \$12.0 million in fiscal year 1998 and \$10.7 million in fiscal year 1999 for disassembly and refurbishment costs for the AV-8B Harrier remanufacture program, whereas it did not report the cost of these workloads in last year's 50-50 report on fiscal year 1998. Also, the distribution of instructions was improved throughout the Department, a key factor in increasing the scope and number of reporting commands.

The military services also increased the amount and scope of reporting by correcting errors and expanding the number of reporting activities from last year. The Navy and the Army made significant corrections in the amounts included in this year's report relative to last year's report.<sup>10</sup> The military departments also more fully reported maintenance in several problem areas we noted last year. For example, the Naval Sea Systems Command reported about \$350 million in fiscal year 1999 for installation modifications compared to only \$62 million last year, when an official incorrectly decided that such work was not depot maintenance. Additionally, more Army organizations reported depot maintenance than in past years (14 commands compared to 11 last year and only 4 the year

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<sup>7</sup>*Depot Maintenance: Workload Allocation Reporting Improved, but Lingering Problems Remain* (GAO/NSIAD-99-154, July 13, 1999) and companion reports noted in the related documents section of this report.

<sup>8</sup>A remanufacture program is an upgrade effort that typically results in a new model number and serial number of the modified system. An upgrade is the alteration, conversion, or modernization of an end item of investment equipment that changes or improves its original purpose or operational capacity in relation to the effectiveness, efficiency, reliability, or safety of the item.

<sup>9</sup>Interserviced workload is depot maintenance work that one service performs for equipment owned and funded by another military service. DOD depot reporting guidance specifies that the owning service reports the work for purposes of depot maintenance workload reporting.

<sup>10</sup>The Army's and the Navy's corrections in fiscal year 1998 reporting resulted in increased percentages for the public sector. The Navy, for example, corrected data that had been reversed in developing the initial report on 1998 last year and corrected another significant error in which a \$267,000 expenditure had been reported as \$267 million.

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before) and additional program offices in the Navy and the Air Force reported for the first time.

Audit agencies' reviews

The quality and consistency of the data reported were significantly improved by the services' audit agencies reviewing collection procedures and preliminary data. In response to our recommendation that the services make greater use of audit agencies, the Army expanded its use of its auditors, the Navy used its audit agency for the first time, and the Air Force continued to use its audit agency as in the past two report cycles. The audit agencies identified many errors, and the reports of each military service were corrected before being forwarded to OSD for consolidation and submission to the Congress. Notwithstanding those corrective actions, as noted later, reviews by two audit agencies raised unresolved issues concerning the accuracy and completeness of the services' data.

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Despite Improvements,  
Errors and Weaknesses  
Remain

Although the extent of errors and omissions we identified in our review of the fiscal year 1998 and 1999 depot maintenance workload data submitted to the Congress was significantly less than in prior reports, we continued to find reporting errors and weaknesses. Most were not as systemic in nature as they were in the past and, in some instances, they were exacerbated by shortcomings in component specific guidance, documentation, or quality of financial data. Moreover, issues identified in Army and Navy audit service reports on data developed by the individual services raise unresolved issues about the magnitude of reporting problems and their effect.

Types of Problems Identified

We identified a range of reporting problems, resulting in both over and underreporting of depot workloads being performed in public facilities and by the private sector. Several examples follow.

OSD guidance requires the cost of government-furnished material provided to contractors to be reported as private sector costs in the workload report. This requirement is to ensure comparability in reporting, since public sector costs include material costs and other factors of production. The Army and the Navy did not fully report the costs of government-furnished material to contractors. Through a review of workload data and discussions with reporting officials, we found that an Army command did not report up to \$30 million in fiscal year 1999 material costs recorded for contract repairs of components funded by the Army's working capital fund and a Navy command did not report a total of about \$125 million for the recorded cost of government-furnished material to contractors for fiscal years 1998 and 1999.

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As we reported last year, consolidating the levels of maintenance and performing depot-level maintenance at field locations complicate workload reporting and result in an underreporting of depot maintenance for both the public and private sectors. Our report<sup>11</sup> on the Army's review of the proliferation of depot workloads at consolidated and non depot locations states that the Army is not sufficiently identifying the amount of depot maintenance work accomplished at nondepot facilities. While the Army identified some maintenance in nondepot facilities, the actual amount could be much greater than the Army reported, but Army officials told us it would be several years before they will have a realistic accounting of this workload. This accounting is expected to increase the total amounts reported for both the public and private sectors.

The identification of depot maintenance work in activities not previously identified as depots is also problematic in the Navy and the Air Force. The Navy's Pacific Fleet report of fiscal year 1999 workloads was based on a rough estimate rather than actual obligation data to represent the depot maintenance work accomplished at the Pearl Harbor Naval Shipyard and Intermediate Repair Facility because they did not maintain the obligation data for the newly consolidated activity. This problem will become even more challenging as the Navy continues with its consolidation of intermediate and depot maintenance activities.

In all three military services, we identified problems in reporting the costs of interim and contractor logistic support contracts. These types of contracts require some judgment and the use of estimating techniques in determining the portion of total recorded contract costs meeting the definition of depot maintenance. For example, through a review of contract files and discussions with officials, we determined that an Air Force program office did not report about \$33 million in recorded software maintenance and related management support costs. As we reported in the past, officials said that there is still some uncertainty and disagreement within the acquisition offices regarding what constitutes reportable depot maintenance. Another problem was that it is often difficult to identify depot maintenance costs when there is no specific contract line item for this specific support category.

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<sup>11</sup>*Depot Maintenance: Army Report Provides Incomplete Assessment of Depot-Type Capabilities* (GAO/NSIAD-00-20, Oct. 15, 1999).

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Warranty provisions specifying the performance of depot maintenance services was another area identified where the services did not fully report some contractor costs. The DOD reporting guidance states that warranty support that occurs prior to the initial operational capability of a system should not be reported. This guidance leaves open the question how to report warranty costs that are obligated prior to initial operational capability but which will provide support for the system after initial operational capability. While we cannot quantify the amount of warranty work that should be reported as depot maintenance, this is an area that needs further examination in future years.

In those cases when either the public or private sector contracts with the other sector for labor or for repair of a component or system that is a subset of a larger maintenance package, the work should be reported for the sector performing the work. Through a review of accounting data, we identified four at the Oklahoma City Air Force depot where specific tasks or the repair of specific items was reported as public sector maintenance when it was actually performed by contractors and should have been reported as contract maintenance. This work represented about \$1.15 million in fiscal year 1999. We do not know how often this is happening, but it is likely to grow as DOD increases its use of public-private partnering arrangements.

#### Limitations in Guidance May Have Contributed to Some Problems

Despite improved guidance issued by OSD, and to a lesser extent the Army and the Air Force, there are still some opportunities to improve policy guidance—in particular that of the reporting components, where limitations in, or an absence of, service specific guidance may have contributed to reporting problems. Continued problems with the reporting of maintenance costs associated with warranties and with depot maintenance performed in activities not traditionally considered as depots or funded with procurement or research and development dollars, rather than operation and maintenance dollars, suggest that additional refinement of guidance could help officials less experienced in such matters better understand the reporting requirements. This issue was more prominent in the Navy, which had not provided component-specific guidance to its reporting activities, resulting in some differences in interpretation and application of DOD's guidance and the absence of a standardized process among different Navy commands. Navy officials said that they issued some guidance in October 1999 based in large part on our findings in last year's

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report<sup>12</sup> and that they are developing a standardized process handbook for use by the different commands.

Although the Army revised its internal instructions to expand upon the OSD guidance, further refinements could reduce ambiguities, particularly with respect to reporting contractor costs, and could emphasize the need for all project managers to report. In its review of preliminary data for fiscal year 1999, the Army Audit Agency added almost \$114 million in contractor maintenance costs to the total reported. Among other errors, auditors determined that the program manager for the Apache helicopter did not report about \$38 million in contractor costs shown in Army records, the program manager for the Kiowa helicopter did not report about \$31 million in contractor costs, seven program managers initially reported program estimates rather than the actual amount of recorded obligations, and one command did not report about \$20 million in recorded contractor costs for software maintenance. The Army Audit Agency also pointed out that the Army needs to develop a reasonable method of determining reportable contract obligations when other logistics support functions are included on contract line items that include depot maintenance.

The Air Force's supplemental guidance was not changed significantly for this year's report, but additional supplemental guidance may still be needed to clarify several areas. For example, we continued to identify problems associated with the reporting of warranties, some contract work performed in support of Air Force depot maintenance programs, and contract work where maintenance was not a specific contract line item.

#### Inadequate Documentation of Services' Analyses Creates Some Uncertainties Regarding Data

Our review this year, as in the past, determined that each of the departments could better maintain auditable records for documenting data collection methodology, estimating techniques, and results. While some central records are maintained, information and reporting rationales at program offices and maintenance activities are sometimes lacking, and it is difficult for a third party to understand and reconstruct the methodology and verify results.

The federal government's internal control standard for appropriate documentation of transactions and internal control states that internal control and all transactions and other significant events need to be clearly

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<sup>12</sup>*Depot Maintenance: Workload Allocation Reporting Improved, but Lingering Problems Remain* (GAO/NSIAD-99-154, July 13, 1999).

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documented and readily available for examination. It further states that all documentation and records should be properly managed and maintained.<sup>13</sup> Good records, documentation of processes followed, and identification of data sources used are important not only for audit and management oversight but also for use as a historical record that can be followed by newly assigned staff to assist in data collection and by programs reporting for the first time. Air Force officials said the relatively high turnover of personnel assigned each year to compute workload data increased training time and errors. The documentation and process problems appeared to be more severe in the Navy than in the other military departments.

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#### Service Audit Agency Issues

While the quality and consistency of data reported by the services were significantly improved by the participation of the service audit agencies, reviews by two of these agencies highlighted uncertainties about the components' data.

The Army Audit Agency reviewed about \$1 billion of the Army's fiscal year 1999 reported obligations (about 58 percent of the total) and recommended adjustments totaling \$149 million. This represented an error rate of 14.9 percent. These adjustments increased the private sector share by 3.6 percent above that represented by the Army's unaudited data. If similar problems were prevalent in remaining data the Audit Agency did not review, and corresponding adjustments made, the private sector share would increase even more. These additional adjustments, and those errors we identified (to the extent values could be quantified), would place the Army very close to the ceiling.

Army auditors identified unreported costs for remanufacturing programs and modifications and some programs that used estimates rather than actual recorded obligations. They also identified problems similar to those they reported on in 1998 involving software maintenance, contractor logistics support, government-furnished material to contractors, and modifications and upgrades. They found that not all project managers were included in the requests for data and had not reported depot maintenance data until the Army audit pointed out the omission.

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<sup>13</sup>Standards for Internal Control in the Federal Government (GAO/AIMD-00-21.3.1, Nov. 1999).

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In completing their review of the Navy's workload data, the Naval Audit Service personnel identified reporting errors and omitted data that increased the total amount of workload reported for fiscal year 1999 by \$106 million (an increase of 1.5 percent) but caused little change in the public-private workload percentages. Much of the increase resulted from correcting the Naval Sea Systems Command's omission of about \$85 million for installation of nuclear modifications. At the same time, Naval Audit Service personnel expressed concerns over the absence of a standard reporting process and the inadequate documentation of the basis for some of the data and generally questioned the quality of the data they reviewed.

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## Accuracy of Future Year Estimates Is in Doubt

Because of data limitations and other weaknesses, we do not believe the Department's report provides a reasonably accurate projection of public and private sector workload expenditures for fiscal years 2000 through 2004. Future year projections, at best, provide a rough estimate of future workload funding split between the public and private sectors, particularly since the projections are constructed using budgetary estimates that, by their nature, will change over time. The reasonableness of the estimates becomes less certain where, as indicated earlier, uncertainties exist regarding the extent to which the Air Force, the Army, and the Navy have fully identified depot maintenance workloads in preparing their reports on prior fiscal year expenditures. While DOD's future year projections do not show its components exceeding the 50-percent ceiling on contract work in fiscal year 2000 and beyond, our analysis indicates that the Air Force may exceed the ceiling this fiscal year and faces significant challenges to remain under the ceiling in future years. While the Army does not face as severe a problem as the Air Force, available data suggest it too will be confronted with difficulties in staying within the 50-percent ceiling in future years, as more maintenance work is expected to go to the private sector.

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## Future Year Data Are Rough Estimates and Subject to Change

We have previously reported that future year projections of depot maintenance workloads should be considered as only a rough estimate of the workload funding split between the public and private sectors.<sup>14</sup> The services' projected depot maintenance expenditures for fiscal years 2000

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<sup>14</sup>*Depot Maintenance: Future Year Estimates of Public and Private Workloads Are Likely to Change* (GAO/NSIAD-00-69, Mar. 1, 2000).

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through 2004 are based on the current funded workloads from the fiscal year 2001 budget submission and future years programming data. However, as previously noted, budget plans frequently change, and the actual workload mix may be significantly different than planned. Further, budget and programming estimates do not include new requirements that have not yet been officially approved.

Despite these factors, some of the input data may represent the best data available, assuming it represents all categories and quantities of work that is supposed to be accounted for, that the relative mix between the public and the private sector represents actual plans, and that all contractor costs, which are generally the most difficult to obtain, are accurately shown.

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**Air Force's Future Projections for Contract Work Are Understated and the Ceiling Will Likely Be Exceeded**

As permitted by 10 U.S.C. 2466, the Secretary of the Air Force waived the 50-percent limitation on private sector work for fiscal year 2000 and notified the Congress that a waiver could also be required for 2001. Nevertheless, the Air Force's projection data for fiscal years 2000 through 2004 show it nearing, but not exceeding, the 50-percent ceiling. Other data indicate the Air Force will likely exceed the ceiling this year and will face considerable challenges remaining under the ceiling in future years.

Our recent testimony and congressional report discussed the Air Force's determination to waive the section 2466 limitation on private sector workloads for fiscal year 2000 (and perhaps in 2001).<sup>15</sup> We pointed out that recent and continuing Air Force plans and initiatives to move more work to the private sector were key factors leading to the need for the waiver and that these actions had increased the private sector share of Air Force depot maintenance work from 36 percent in 1991 to near the 50-percent ceiling in 2000.

Air Force contract maintenance is increasing more than previously estimated. For example, the value of long-term depot contracts is expected to increase from \$1.1 billion in fiscal year 2000 to \$1.5 billion in fiscal year 2004, yet this amount does not include some workload information for new

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<sup>15</sup>Depot Maintenance: Air Force Faces Challenges in Managing to 50-50 Ceiling (GAO/T-NSIAD-00-112, Mar. 3, 2000) and Depot Maintenance: Air Force Waiver to 10 U.S.C. 2466 (GAO/NSIAD-00-152R, May 22, 2000).

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or upgraded systems that do not have final support plans. Nonetheless, as we recently reported,<sup>16</sup> the Air Force is using or planning to use multifunction, long-term contractor support for 75 new or upgraded systems and subsystems. Furthermore, we reviewed 13 programs that had entered the source-of-repair process between September 1999 and February 2000 and determined that 11 had been recommended for private sector contract repair. Thus, the trend toward increased contractor repair continues. According to Air Force officials, these are the current recommendations of the program managers and not the final approved recommendations by the Air Force. They said 50-50 compliance will be fully considered before making the final source-of-repair decisions. Finally, some of the data used in projecting the future Air Force 50-50 allocations underestimate contract repair workloads.

An April 17, 2000, memorandum from the Commander of the Air Force Materiel Command to command organizations directed that they identify current and new workloads that could be moved to public depots to help the Air Force stay under the 50-percent ceiling on contract work for fiscal years 2000 and 2001, as well as in the longer term. While a plan was to have been developed by May 31, 2000, according to Air Force officials, this process has thus far failed to achieve its goals and no workload has yet been approved for movement to the public sector.

The Air Force's fiscal year 2000-2004 depot allocation data include several significant adjustments that result in understating the Air Force's contracted maintenance, keeping it below the 50-percent ceiling. Our assessment of the current status of the workload mix for fiscal year 2000 and the projections for 2001 indicates the Air Force could exceed the ceiling by over \$200 million in fiscal year 2000 and will be significantly challenged to make planned source of repair changes in time to correct the imbalance for 2001. Since the report on future years was sent to the Congress, more private sector workloads for bridge and emergency contracts have been identified than were previously estimated and some new contract workloads resulting from source-of-repair decisions have been recognized.<sup>17</sup>

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<sup>16</sup>*Defense Logistics: Air Force Report on Contractor Support Is Narrowly Focused* (GAO/NSIAD-00-115, Apr. 20, 2000).

<sup>17</sup>Bridge contracts are for short-term workloads performed by a contractor to support requirements during workload transitions from closing depots to other military depots.

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Air Force officials said that as of May 2000, the Air Force had determined that it could be \$115 million over the ceiling in fiscal year 2000. They noted, and we agree, that the depot maintenance execution data fluctuate and that the data will continue to fluctuate through the end of 2000. Our \$200-million estimate represented a mid-June 2000 Air Force Materiel Command assessment of the fiscal year 2000 depot maintenance execution information. Moreover, available information indicates that the Air Force plans to increase its fiscal year 2000 contract workload by moving program depot maintenance work for the KC-135 aircraft from the Oklahoma City depot to a contractor. Thus, unless the Air Force is able to perform more workload in its military depots than is currently programmed, the fiscal year 2000 contract imbalance could grow even larger.

Air Force officials told us that fiscal year 2001 will pose an equally big challenge. However, they outlined an ongoing three-pronged effort to conform workload assignments to legislative guidelines: first, identify candidate workloads that could be shifted from private to public sources in 2001; second, identify longer term candidates; and third, focus on new weapon system support planning. However, to date there have been few concrete results that mitigate the potential contractor imbalance for 2000 or 2001.

In developing its projected depot maintenance workloads for fiscal years 2000 through 2004, the Air Force assumed that it would be able to shift work currently being performed by the private sector to public depots and adjusted its funding to reflect this shift. While these adjustments represent the amount of workload that the Air Force is hopeful of moving to public depots during the fiscal years 2000 to 2004 time period, a lack of success thus far in accomplishing such changes in fiscal year 2000 makes it uncertain to what extent such transfers will be made between 2001 and 2004.

Air Force officials at Air Force Materiel Command headquarters and at the three logistics centers remaining open after base closure decisions are implemented said that there are no quick fixes to the problem and that without a commitment to designate new and upgraded systems for repair in the military depots, the Air Force is not likely to be successful in resolving its ceiling problem. These officials said that the problem is not getting better; rather it is getting worse. The fact that no program offices have identified future repair source changes that would improve the workload allocation imbalance indicates the difficulty the Air Force faces in the future. Air Force officials point to a May 31, 2000, Air Force decision to

delay source-of-repair decisions on the F-22 aircraft until 2008 as a further example of the 50-50 imbalance problem. They also note that preliminary planning for the Joint Strike Fighter program, an aircraft that may comprise 75 percent of the U.S. fighter aircraft in the future, is moving toward a decision for total contractor support. Officials said that before the Air Force can make meaningful progress in resolving its 50-50 imbalance, these trends must change and the Air Force must adopt a different support strategy than the one it has pursued for the past 4 or 5 years. However, no overall management plan exists to specifically meet the requirements of section 2466.

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**Army Also Faces a Long-term Challenge to Stay Within the Contract Ceiling**

While the reported 50-50 outyear data show that the Army is also moving close to the 50-percent ceiling on contract work, Army officials do not believe the Army will exceed the 50-percent ceiling between fiscal year 2000 and 2004. Army leadership holds quarterly discussions to consider whether execution changes from the current year's plan could adversely affect compliance with the ceiling requirement. Army officials said they would adjust the plan if required to stay below the ceiling. Given that the errors Army Audit Agency and we identified in the data put the Army right at the 50-percent ceiling for fiscal year 1999, if similar errors and omissions apply to the future data, the Army is also facing a 50-50 imbalance in the future, unless it revises its plans for support of new and upgraded systems coming into the inventory.

Army officials said that with regards to the future challenge, depot maintenance source-of-repair decisions will be documented and the impact of these decisions on the ceiling will be discussed at the milestone review point authorizing the start of the engineering and manufacturing development phase for new weapon systems. At this point, only one new system, the Comanche, has gone through this milestone review since the new procedures were instituted in November 1999, and it was granted a temporary waiver of the requirement to complete a source-of repair and core analysis. While early planning calls for the Comanche to be a contractor-supported system, it is unclear whether the new process will affect the final decision.

## Conclusions

Although the military services have significantly improved the quality and completeness of their depot maintenance reporting data, material reporting weaknesses remain. As a consequence, we were unable to determine with precision whether DOD complied with the 50-percent limitation on private sector performance under section 2466, even though the services reported that they did not exceed the 50-50 ceiling for fiscal years 1998 and 1999. Policy and execution issues must be addressed to improve the accuracy and completeness of the prior year data. While OSD and the Army and Air Force supplementary policy guidance have improved each year, some areas still require further attention and may require more specific implementation guidance at the service level as well as closer scrutiny by the services to ensure consistent implementation throughout their organizations. Of particular concern is the reporting of depot maintenance associated with new and upgraded weapon systems, software, warranties, workloads performed in nontraditional depot maintenance activities, and workloads that are performed by one sector but which are part of a maintenance package that is allocated to a different sector. These and other areas continue to be problematic and will require greater emphasis in the future.

As the military services approach the 50-percent ceiling, it is increasingly important to gain a more realistic perspective of the expected future balance of the public and private sector mix of depot maintenance work so that DOD can better define a workable strategy for meeting support needs while complying with the 10 U.S.C. 2466 requirement establishing the ceiling. While the Air Force and the Army have initiated some actions they believe will address the problem, it is too early to tell if they have a long-term strategy in place that will assure their ability to deal effectively with the contract maintenance management challenge in the future.

## Recommendations

To improve the reporting of depot maintenance workload data to accurately reflect the allocation of work between the public and private sectors and comply with the requirement that not more than 50 percent of the depot maintenance work be performed by the private sector, we recommend that the Secretary of Defense

- require that the military services, in preparing the future year estimates of depot maintenance workloads that will be submitted each April, accurately reflect, to the extent practical, the projected maintenance

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costs and public-private sector allocations for new and upgraded systems;

- require the Secretary of the Air Force to implement a long-term strategy to manage its weapon system support programs to comply with the funding requirement that not more than 50 percent of the depot maintenance program be used for work performed by the private sector;
- require the Secretary of the Navy to issue comprehensive supplementary instructions tailoring OSD's guidance to the Navy's operating environment to improve workload reporting and to implement adequate management controls and documentation requirements; and.
- direct that reporting services provide improved guidance and increased management attention to improve workload reporting in the areas of government-furnished material, warranties and software maintenance, as well as in identifying depot maintenance work accomplished in non-traditional activities and identifying reportable obligations for depot maintenance on contracts where such amounts are not readily identifiable.

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## Agency Comments

Representatives from the OSD (Maintenance Policy, Programs, and Resources) and similar offices in the Air Force, the Army, and the Navy provided oral comments on a draft of this report. The officials agreed with the recommendations and provided technical comments, which we incorporated in the report as appropriate.

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## Scope and Methodology

To review DOD's reported amount of depot maintenance performed and the percentage of the workload allocated to the public and private sectors for fiscal years 1998 and 1999, we analyzed each service's procedures and internal management controls for collecting and reporting depot maintenance information for purposes of responding to the section 2466 requirement. We reviewed supporting details (summary records, accounting reports, budget submissions, and contract documents) at departmental headquarters, major commands, and selected maintenance activities. We compared processes to the legislative provisions, OSD guidance, and military service instructions. We judgmentally selected certain programs and maintenance activities for a more detailed review.<sup>18</sup>

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<sup>18</sup>Given the nature of our sample, the results are not projectible to the universe of depot maintenance activities.

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We particularly examined reporting categories that we and DOD personnel had identified as problem areas, including interserviced workloads, contractor logistics support, maintenance funded with procurement or research and development dollars, software maintenance, and maintenance for such programs as the C-17 aircraft and the Apache helicopter. We evaluated processes for collecting and aggregating data to ensure accurate and complete reporting and to identify errors, omissions, and inconsistencies. We coordinated our work and mutually shared information with service audit agencies, which had a more extensive role this reporting period in reviewing individual service's data collection efforts.

We used much the same approach and methodology in reviewing the future years' estimates for fiscal years 2000-2004. Although this is a budget-based projection of expenditures, the definitions, guidance, organization, and processes used to report future data are much the same as for the report on actual obligations of the two preceding years. We discussed with DOD officials the main differences between the two processes and the way the data are derived from budgets and planning requirements. We performed certain checks and tests, such as deviance analyses, for consistency of this information with prior years and with the outyear budgeting and programming data used in DOD's budget submissions and reports to the Congress. We used to a great extent our prior and ongoing audits in such areas as sustainment planning, depot policies, financial systems and controls, and DOD pilots and initiatives for increasing contractor involvement in maintenance.

We conducted our review from February to June 2000, in accordance with generally accepted government auditing standards.

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We are sending copies of this report to the Honorable William S. Cohen, Secretary of Defense; the Honorable F. W. Peters, Secretary of the Air Force; the Honorable Louis Caldera, Secretary of the Army; the Honorable Richard Danzig, Secretary of the Navy; the Honorable Jacob J. Lew, Director, Office of Management and Budget; and interested congressional committees. We will also make copies available to others upon request.

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GAO's contacts and key contributors to this report are listed in appendix II.

A handwritten signature in black ink that reads "David R. Warren". The signature is fluid and cursive, with "David" on top and "R. Warren" below it.

David R. Warren, Director  
Defense Management Issues

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List of Congressional Committees

The Honorable John Warner  
Chairman  
The Honorable Carl Levin  
Ranking Minority Member  
Committee on Armed Services  
United States Senate

The Honorable Ted Stevens  
Chairman  
The Honorable Daniel Inouye  
Ranking Minority Member  
Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable Floyd Spence  
Chairman  
The Honorable Ike Skelton  
Ranking Minority Member  
Committee on Armed Services  
House of Representatives

The Honorable Jerry Lewis  
Chairman  
The Honorable John Murtha  
Ranking Minority Member  
Subcommittee on Defense  
Committee on Appropriations  
House of Representatives



# Problem Areas in Workload Reports

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Our review of the Department of Defense's (DOD) two reports on depot maintenance workloads, collectively encompassing fiscal years 1998 through 2004, identified errors, omissions, and inconsistencies in the military departments' data.

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## Government-Furnished Material

Office of the Secretary of Defense (OSD) guidance requires that the cost of government-furnished material provided to contractors should be reported as funding that has been obligated to the private sector. This requirement is to ensure comparability in reporting since public sector obligations include the costs of material and other factors of production. For purposes of reporting funding obligations, all factors of production are to be counted as a part of the reporting data for both the public and private sectors according to which sector accomplishes the maintenance. Examples of problems that we noted in this reporting area follow.

Two Army commands did not fully report the costs of material provided to contractors. The Aviation and Missile Command did not report any costs for government-furnished material for its reparable components contract workloads funded by the Army's working capital fund. After submitting its fiscal year 1999 data to the Army, officials identified about \$30 million of material furnished to aviation and missile secondary item contracts, but others decided not to adjust the reported data. Command officials told us that government-furnished material for reparable components is not tracked and would require an accounting adjustment. Material is tracked for major aviation and missile equipment items, and officials reported \$3.9 million in fiscal year 1999 for government-furnished material to contractors. The Army's Communications Electronics Command also did not report any costs for government-furnished material to its contractors. Command officials advised the Army Audit Agency that they do not have a system to track material provided to their contractors and that they could not provide an estimate on the total amount requisitioned by contractors during fiscal year 1999.

The Navy's Inventory Control Point at Philadelphia, Pennsylvania, which manages aircraft parts, did not report about \$125 million for the cost of government-furnished material to contractors for fiscal years 1998 and 1999. This material was used by contractors in repairing components managed by the Navy and was accounted for as an expense item. The Inventory Control Point does report government-furnished material for contractor repair of components that are not directly managed by the Navy because those are considered sales. This office also did not report

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government-furnished material projected to be about \$300 million for the fiscal years 2000-2004 period.

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## Contract Maintenance

The statutory definition of depot maintenance includes depot maintenance and repairs accomplished under interim contractor support, contractor logistics support, and similar types of contracts.<sup>1</sup> If it is not practical to determine the amount of depot maintenance based on specific contract line items, OSD and service supplemental guidance provides for the use of estimating techniques. The reporting service is required to maintain records on the amounts reported and descriptions of estimating techniques used. As in past reviews, we found a number of errors and other problems in reporting contract maintenance. Individuals charged with reporting must exercise judgment that may result in errors or inconsistencies with other programs. The errors and problems we noted follow.

Several Army program offices misreported contractor support costs. Some amounts were overstated by including nondepot maintenance related costs and others were understated when officials reported budgeted rather than actual costs. For example, officials at the Intelligence and Security Command overstated contract depot maintenance for a program by about \$830,000 by including nondepot maintenance related obligations for training and office administration. Another command misreported costs because it reported on a calendar year basis, rather than a fiscal year basis.

Three Navy program offices overreported contract costs by about \$39 million. Officials reported activities such as contractor support to headquarters and support for a database on aircraft discrepancy reports and mishaps. These kinds of activities do not meet the definition of depot maintenance.

The Air Force's C-17 program office did not report logistics program management costs and technical data associated with the provision of depot maintenance services. Air Force guidance provides that a pro rata share of contractor management support and data costs should be included in the depot maintenance reported for 50-50 purposes. The C-17 office could have used an estimating technique to derive the percentage of these costs that are attributable to the depot maintenance responsibilities and

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<sup>1</sup>10 U.S.C. 2460.

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therefore reportable in the 50-50 report. Applying a 10-percent estimating factor to the substantial flexible sustainment contract would add about \$18.6 million to the private sector total in fiscal year 1999.

Air Force officials agreed that they had not reported about \$3 million in technical data costs, but they stated that they had included some management costs in the 50-50 report. However, they were unable to reconcile the data reported in the 50-50 report with supporting accounting data, indicating an underreporting of total depot costs consistent with our findings. Air Force officials said they would thoroughly review the C-17 reporting methodology to improve accuracy and support for next year's 50-50 report.

Officials at the Aeronautical Systems Center did not report about \$2.1 million obligated for depot maintenance on nine training systems during fiscal year 1999. According to Air Force officials who are charged with coordinating the Center's call for data, there is still some uncertainty and disagreement within the acquisition offices regarding what constitutes reportable depot maintenance. In this service, as in the others, depot maintenance is still sometimes associated only with the operation and maintenance appropriation account. However, the statutory definition of depot maintenance includes all depot work regardless of funding source and location. The Air Force did report these items in the future years' report.

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## Software Maintenance

OSD guidance implementing the statutory definition and reporting requirements calls for reporting all aspects of depot maintenance on software, which consists of changes to operational software in weapon systems, components, and associated automated test equipment. Activities to be reported after initial operating capability of the weapon system is achieved include correcting errors in the software, adding incremental capability improvements (or deleting unneeded features) through software changes, and adapting software to retain compatibility with hardware or with other systems with which the software interfaces. Examples of problems that we noted in these areas follow.

The C-17 program officials did not report any depot-level software maintenance. The program office obligated about \$28 million per year in fiscal years 1998 and 1999 for software workloads accomplished by contract. Program officials said that the work involved both depot-level maintenance and other tasks considered to be developmental in nature,

which are not reportable. Contractor personnel performed block changes in code and upgraded software to ensure compatibility with the newest configuration. Air Force officials said they generally perform depot maintenance concurrent with production block upgrades, which they consider the primary factor driving software maintenance work. Officials did not determine how much of the \$28 million should be classified as depot-level maintenance. Officials also did not include software maintenance in their future years' projections.

B-1B program officials overreported contractor software maintenance workloads by including developmental activities. Estimated overstatements were \$7.5 million combined for fiscal years 1998 and 1999 and an estimated \$111.8 million over the fiscal years 2000-2004 reporting period.

The B-2 program office estimates for contractor software included about \$14.3 million in software maintenance expected to be accomplished by the public depot.

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## Depot Maintenance in Field or Other Nondepot Locations

Depot-level maintenance is to be reported regardless of where it is accomplished. All repairs designated or coded as depot-level that are performed at locations other than a depot are to be included. Added to guidance this year was the direction that the military services issue guidance, as necessary, concerning consolidation of depot and nondepot work at individual locations.

The distinction between depot-level maintenance and other levels of maintenance and manufacturing work has become increasingly vague as the services move depot workloads to operating locations, redefine required levels of maintenance, and consolidate maintenance organizations. While depot-level maintenance workloads continue to be performed at traditional depot activities, they are also performed by civilian and active-duty military personnel in military units and by contractors at various field locations and local repair activities.

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**Appendix I**  
**Problem Areas in Workload Reports**

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We identified about \$6.6 million in depot-level repairs accomplished by contractor personnel in Europe and \$2.7 million accomplished by Army personnel in Korea that was not reported in fiscal year 1999. Potentially, there is much more depot-level work at consolidated maintenance locations and at Army bases not being reported. As we reported last year, the Army's move to consolidate maintenance activities and to perform maintenance at field locations continues to pose reporting challenges and may have resulted in an underreporting of depot maintenance for both the public and private sectors. Our report<sup>2</sup> on the Army's review of the proliferation of depot workloads at consolidated and nondepot locations states that the Army is not sufficiently identifying the amount of depot maintenance work accomplished at nondepot facilities. Additional amounts of depot maintenance-type work and repair capabilities exist at various nondepot facilities and could be much greater than the Army reported.

For example, the Army overhauls and rebuilds numerous components, including engines, transmissions, circuit cards, and generators, at more than 100 local maintenance facilities that are managed under the integrated sustainment maintenance program. In fiscal year 1998, the cost of this program's secondary item repair work exceeded \$260 million. While much of this work appears to meet the definition of depot maintenance as specified in 10 U.S.C. 2460, current Army policies and procedures allow it to be done at nondepot locations, and the workload was not included in the Department's 50-50 report.

We concluded in our October 1999 report that the Army was unable to develop accurate and consistent estimates of depot maintenance-type work because its reporting criteria are not consistent with 10 U.S.C. 2460 guidance and that its management information systems and procedures are not equipped to assess the magnitude and cost-effectiveness of all maintenance and supply functions. The Army is transiting to the national maintenance strategy, and it plans to revise its maintenance manuals and policy statements to redefine levels of maintenance. The current depot and general support levels will be combined and relabeled as sustainment maintenance workload tasks that involve overhauling and rebuilding items.

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<sup>2</sup>*Depot Maintenance: Army Report Provides Incomplete Assessment of Depot-Type Capabilities* (GAO/NSIAD-00-20, Oct. 15, 1999).

In March 1999, Army officials advised that all national maintenance workloads would be reported as depot maintenance for the 50-50 public and private sector workload allocations, without regard to the location where work is performed. This policy change should eliminate much of the current confusion regarding the identification of depot type workloads and enable the Army to develop more accurate and consistent 50-50 reports. The officials said that this change likely will not take place until October 2000. This change could materially increase the total amount of depot workload reported and alter the relative public-private mix compared to the Army's current projections for 2000-2004.

Changes in reporting definitions and work locations also contribute to inconsistency in reporting. For the fiscal year 1999 workload report, the Army National Guard and Reserves reported about \$34.7 million in repairs of trucks and vehicles. The Eighth Army in Korea reported (1) about \$11.7 million for work performed by government employees for their general support repair program that extends the life of equipment like combat and wheeled vehicles and (2) about \$4.9 million for repair of major assemblies and components that were repaired up to the general support level. Forces Command, on the other hand, did not report wheeled vehicle repair at contractor operated facilities at Forts Polk and Riley because the work was classified as general support, which is considered to be below depot maintenance.

The Navy had a similar problem as the Army in identifying and reporting depot-level workloads at consolidated and field-level activities. The Pacific Fleet's reporting of fiscal year 1999 through 2004 workloads included a rough estimate of depot maintenance accomplished at the newly consolidated Pearl Harbor Naval Shipyard and Intermediate Repair Facility. Fiscal year 1999 was the first year that the consolidated facility operated, used a single financial system, and received mission funding rather than the Navy Working Capital Funds. The amount reported for depot work was estimated, rather than actual obligations, because a system to identify and account for depot-level work had not been established. Officials derived the estimate by subtracting material costs associated with the military workforce at the activity from the total mission funding received. Last year, we were told that this consolidated activity could have difficulty determining the depot-level work for purposes of the depot workload report. Pacific Fleet has not yet developed a system to track and account for work meeting the definition of depot workload used for the workload reporting requirement.

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The Navy did not report about \$10 million spent annually for submarine component repairs. An official said that government workers accomplish about 80 to 90 percent of the workload and contractors do the rest. Intermediate-level monies fund the work. In previous reports, we questioned the Navy's position that no depot-level work was performed at the two Trident Refit Facilities because they were classified as intermediate level activities and funded with intermediate level dollars. We determined that the Navy's reported data for fiscal year 1999 included about \$18 million for depot-level work done at one facility. Our review of maintenance plans for Trident submarines, however, showed that a considerable number of tasks were coded as depot-level, indicating that depot is the recommended level that should do the work. This work was done at private and government facilities, including the two Trident facilities, and was not reported in the 50-50 data. In addition, Atlantic Fleet data indicates that at least a small amount—about \$300,000—for repair of various submarine components at the Kings Bay facility should have been reported. We do not know how much should be reported as depot maintenance out of the total obligated of about \$160 million annually.

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## Warranties

A provision for reporting contract warranties for depot maintenance and repair was added to the OSD guidance this year. Warranty support occurring after the initial operating capability date should be reported to the extent that the terms and conditions specify performance of depot maintenance services. The use of maintenance warranties appears to be increasing as a result of acquisition reforms and adoption of commercial sector practices. The errors we noted in this area follow.

We identified two Navy programs and about \$1.5 million for fiscal year 1999 where warranties appeared to meet the reporting definitions in OSD guidance. However, no costs of extended warranties for depot-level support were reported. Because several officials we talked to were not aware of the OSD requirement to report extended maintenance warranties and because the limited Navy instructions did not mention it, there could be additional programs with reportable warranties that should have been included in the 50-50 report.

Although the Air Force reported more warranties this year than last, we identified one program that was not reported, with applicable depot costs of about \$371,000 in fiscal year 1999.

## Interservice

Interserviced workload is depot maintenance work performed by one military department on equipment owned and funded by another military service. OSD guidance directs that the service owning the equipment and managing the funds should report the depot maintenance. The reporting service must also determine whether the workload was done by government workers or by contractor personnel. The Marine Corps incorrectly reported about \$8.2 million in organic interserviced workload as contract in its report on fiscal year 1998.

## Contractor Personnel Augmenting Public Sector Work

OSD guidance states that contracts for depot maintenance and repair accomplished by contractor personnel assigned to work on government owned and operated installations should be counted as private sector workload. This workload includes direct labor augmentation of public depot maintenance by contractor personnel. The Air Force increased the use of augmentees to assist on repairs during the transition of workloads from closing to receiving depots, and, except for the following instances, appeared to have properly accounted for the work as private sector.

- We identified four instances at the Oklahoma City Air Logistics Center where some specific tasks on items reported as public sector maintenance were actually accomplished by contractors, either because it involved a proprietary process or because of temporary constrained capacity in the depot. These tasks cost about \$1.15 million in fiscal year 1999 and \$0.5 million in fiscal year 1998. We could not determine the extent of such activities occurring in other workloads at other Air Force depots.
- We identified another instance that resulted in misreporting \$1.2 million in fiscal year 2000 as public sector workload. One office had to contract out more of its public sector workload than initially projected and reported in the 50-50 report. These kinds of errors double the impact because the dollars must be subtracted from one sector and added to the other.

## Other

According to OSD and Air Force guidance, the costs or projected expenditures for all factors of production—labor, material, parts, indirect, and overhead—associated with a particular workload should be aggregated and reported as either public or private workload depending on who does the actual maintenance. In other words, for 50-50 reporting, costs should be allocated depending on which sector is performing the maintenance on the

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**Appendix I**  
**Problem Areas in Workload Reports**

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end item. For example, contract maintenance required for depot maintenance plant equipment that government workers use to repair items should be counted as public sector costs because it is part of the overall cost incurred by the government in producing the repair.

Air Force officials, however, continue to make an adjustment for general and administrative expenses associated with contracts. They added \$24.0 million and \$41.9 million in fiscal years 1998 and 1999, respectively, to the reported public sector total and subtracted like amounts from the private sector side. These amounts were for the overhead and salary costs incurred by government personnel in administering depot maintenance contracts funded through the working capital funds. Air Force officials believe these costs should be reported as part of the public sector since they involve public sector employees. This area is not clearly dealt with in existing guidance.

Air Force officials said that to count this cost as contract would misrepresent the percentages of funds expended for work by DOD versus nongovernment employees. OSD 50-50 reporting guidance requires that overhead and indirect costs be counted in the sector that accomplished the maintenance. Thus, we believe that it would be appropriate for costs associated with administering the contract to be counted as private sector costs of doing business.

OSD guidance on the future years' report was to express projected obligations in then-year (inflated) dollars. We determined that several Air Force offices did not inflate their future projections, resulting in an understatement of future workloads for both public and private sectors.

# GAO Contacts and Staff Acknowledgements

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## GAO Contacts

Barry W. Holman (202) 512-5581  
Julia C. Denman (202) 512-4290

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## Acknowledgements

In addition to the above contacts, Bruce Fairbairn, Raymond Cooksey, Andrew Marek, Fred Naas, Steven Hunter, and Robert Preston made contributions to this report.

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# Related GAO Products

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*Depot Maintenance: Air Force Waiver to 10 U.S.C. 2466*  
(GAO/NSIAD-00-152R, May 22, 2000).

*Defense Logistics: Air Force Report on Contractor Support Is Narrowly Focused* (GAO/NSIAD-00-115, Apr. 20, 2000).

*Depot Maintenance: Air Force Faces Challenges in Managing to 50-50 Ceiling* (GAO/T-NSIAD-00-112, Mar. 3, 2000).

*Depot Maintenance: Future Year Estimates of Public and Private Workloads Are Likely to Change* (GAO/NSIAD-00-69, Mar. 1, 2000).

*Depot Maintenance: Workload Allocation Reporting Improved, but Lingering Problems Remain* (GAO/NSIAD-99-154, July 13, 1999).

*Navy Ship Maintenance: Allocation of Ship Maintenance Work in the Norfolk, Virginia Area* (GAO/NSIAD-99-54, Feb. 24, 1999).

*Defense Depot Maintenance: Public and Private Sector Workload Distribution Reporting Can Be Further Improved* (GAO/NSIAD-98-175, July 23, 1998).

*Defense Depot Maintenance: DOD Shifting More Workload for New Weapon Systems to the Private Sector* (GAO/NSIAD-98-8, Mar. 31, 1998).

*DOD Depot Maintenance: Information on Public and Private Sector Workload Allocations* (GAO/NSIAD-98-41, Jan. 20, 1998).

*Defense Depot Maintenance: Uncertainties and Challenges DOD Faces in Restructuring Its Depot Maintenance Program* (GAO/T-NSIAD-97-111, Mar. 18, 1997, and GAO/T-NSIAD-97-112, Apr. 10, 1997).

*Defense Depot Maintenance: DOD's Policy Report Leaves Future Role of Depot System Uncertain* (GAO/NSIAD-96-165, May 21, 1996).

*Defense Depot Maintenance: More Comprehensive and Consistent Workload Data Needed for Decisionmakers* (GAO/NSIAD-96-166, May 21, 1996).

*Defense Depot Maintenance: Privatization and the Debate Over the Public-Private Mix* (GAO/T-NSIAD-96-146, Apr. 16, 1996, and GAO/T-NSIAD-96-148, Apr. 17, 1996).

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**Related GAO Products**

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*Depot Maintenance: Issues in Allocating Workload Between the Public and Private Sectors* (GAO/T-NSIAD-94-161, Apr. 12, 1994).

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